REMARKS

Claims 1-72 are pending. Claims 1-72 are rejected under 35 U.S.C. § 103(a).

Examiner has rejected claims 1-3, 8, 11-14, 16-17, 20-21, 24-29, 36-39, 41-42, 45-46, 49-50, 52, 54-55, 58, 61, 64-65, 68-69, and 72 under 35 U.S.C. § 103(a) as unpatentable over Jamal et al. (U.S. Pat. No. 5,930,366) in view of Popovic' (U.S. Pat. No. 6,567,482).

To establish a prima facte case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Applicants respectfully submit that no combination of the cited references teach or suggest all the claim limitations.

Examiner has identified Cp and Cs (Figure 6) of Jamal as the primary and secondary synchronization codes, respectively. Examiner has further identified Cw,c 128 and Cw,d 122 (Figure 7) as the second and third sequence, respectively. Jamal discloses codes code Cw,d is a spreading code for dedicated channels. (col. 12, lines 8-11) and code Cw,c is a spreading code for common channels (col. 12, lines 22-24). Jamal further discloses that codes Cp and Cs are used in acquisition channels. (Figure 7 and col. 12, lines 58-65 and col. 13, lines 4-9). Code Cs, therefore, is unrelated to codes Cw,c and Cw,d. Thus, Jamal fails to disclose "circuitry for providing the secondary synchronization code in response to a second sequence and a third sequence" as required by claims 1-26.

Examiner has identified the first sequence as code Cp. Thus, Jamal also fails to disclose "wherein the third sequence comprises a subset of bits from the first sequence" as required by claims 1-26. Jamal specifically states that code Cp does not use Walsh type codes Cw. (col. 12,

lines 44-51). For all the foregoing reasons, therefore, claims 1-26 are patentable under 35 U.S.C. § 103(a).

Examiner admits that Jamal fails to disclose "wherein the third sequence comprises a subset of bits from the first sequence" as required by claims 1-26. Examiner relies on Popovic' for this missing limitation. Examiner states that Popovic' 'teaches the PSC is a Golay complementary sequence (column 7 lines 9-15, column 19 line 67-column 20 line3) and a third sequence (signature sequence) comprising a subset of bits from the first sequence (column 7 lines 14, wherein the first sequence/PSC is a Golay sequence generated by signature sequences)." As applicants understand this statement, Examiner has identified the primary synchronization code (PSC) of Popovic' as both the first and third sequence of claims 1-26. Although the PSC of Popovic' might be construed as the first sequence, it cannot be the third sequence of claims 1-26. If the PSC of Popovic' is taken as the third sequence, there is no "circuitry for providing the secondary synchronization code in response to a second sequence and a third sequence" as required by claims 1-26. In fact, Popovic' specifically teaches that the secondary synchronization code (SSC) should be orthogonal to the primary synchronization code (PSC). (col. 19, line 67 through col. 20, line 1). Popovic' specifically teaches away from including a common sequence of bits in the PSC and the SSC. Thus, claims 1-26 are patentable under 35 U.S.C. § 103(a).

Claims 27-49 recite "providing the primary synchronization code in response to a first sequence; and providing the secondary synchronization code in response to a second sequence and a third sequence; ... wherein the third sequence comprises a subset of bits from the first sequence." Claims 50-57 recite "producing a primary synchronization code comprising a first code sequence; producing a secondary synchronization code comprising a second code sequence combined with a third code sequence, wherein the second code sequence is from a plurality of sequences, wherein each of the plurality of sequences is orthogonal with respect to all other sequences in the plurality of sequences, and wherein the third code sequence comprises a subset of bits of the first code sequence." Claims 58-63 recite "identifying a primary synchronization code comprising a first code sequence; identifying a secondary synchronization code comprising a second code sequence combined with a third code sequence, wherein the second code sequence is from a plurality of

sequences, wherein each of the plurality of sequences is orthogonal with respect to all other sequences in the plurality of sequences, and wherein the third code sequence comprises a subset of bits of the first code sequence." Claims 64-68 recite "producing a primary synchronization code comprising a first code sequence; producing a secondary synchronization code comprising a second code sequence combined with a third code sequence, wherein the second code sequence is from a plurality of sequences, wherein each of the plurality of sequences is orthogonal with respect to all other sequences in the plurality of sequences, and wherein the third code sequence includes a plurality of subsets of bits, each subset including a fourth sequence of bits from the first code sequence and a complement of a fifth sequence of bits from the first code sequence." Claims 69-72 recite "identifying a primary synchronization code comprising a first code sequence; identifying a secondary synchronization code comprising a second code sequence combined with a third code sequence, wherein the second code sequence is from a plurality of sequences, wherein each of the plurality of sequences is orthogonal with respect to all other sequences in the plurality of sequences, and wherein the third code sequence includes a plurality of subsets of bits, each subset including a fourth sequence of bits from the first code sequence and a complement of a fifth sequence of bits from the first code sequence." (emphasis added). As previously explained, these limitations are notably absent from the disclosures of Jamal and Popovic'. Thus, applicants respectfully submit that claims 1-72 are patentable under 35 U.S.C. § 103(a).

Examiner has rejected depending claims 4, 15, 18, 22, 30, 40, 43, 47, 53, 56, 60, 62, 66, and 70 under 35 U.S.C. § 103(a) as unpatentable over Jamal et al. (U.S. Pat. No. 5,930,366) in view of Popovic' (U.S. Pat. No. 6,567,482), and further in view of Nystrom et al. (U.S. Pat. No. 6,526,091). Applicants believe that this rejection of depending claims is moot in view of the patentability of respective independent claims as previously explained.

In view of the foregoing, applicants respectfully request reconsideration of claims 1-49 and allowance of claims 1-72. If the Examiner finds any issue that is unresolved, please call applicants' attorney by dialing the telephone number printed below.

Respectfully submitted,

Robert N. Rountree Attorney for Applicants Reg. No. 39,347

Robert N. Rountree, LLC 70360 Highway 69 Cotopaxi, CO 81223 Phone/Fax: (719) 783-0990